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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,970	03/30/2001	Motohide Tamura	Q63782	6901

7590 12/17/2004
SUGHRUE, MION, ZINN, MACPEAK & SEAS PLLC
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Washington, DC 20037-3202

EXAMINER

MENEFEE, JAMES A

ART UNIT PAPER NUMBER

2828

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/820,970

Applicant(s)

TAMURA ET AL.

Examiner

James A. Menefee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-7 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some * c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

A final rejection in this case was mailed on 5/6/2004. However, it has come to the examiner's attention that the final rejection was inadvertently mailed to the wrong address. Accordingly, the action is being resent. The time period for response will run from the mailing date of this action. The examiner apologizes for any inconvenience.

This action is in response to applicant's response filed 3/22/2004. Claims 1-8 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Prein et al. (US 4,651,324). Prein discloses the claimed invention as follows.

Regarding claims 1 and 2, Prein discloses a laser oscillator comprising a laser oscillation means for employing a discharge to excite a laser and to generate a laser beam, wherein the laser oscillation means comprises at least a discharge electrode including an electrode tube and an insulator, a box for storing the laser oscillation means, and an optical catalyst layer 13. The catalyst layer 13 inherently is located at a location where uv rays generated by the discharge are exposed. The catalyst layer 13 may either be located on the inner wall of said box (layer 13 at

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bottom of Fig. 1) or may be located on a plate 12 where the plate is located on an inner wall of the box.

Regarding claim 3, the catalyst layer 13 is disclosed as able to decompose nitrogen oxides.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prein. Prein discloses the limitations of the claims above, but does not include a uv sensor in the box. It is well known in the art to include sensors in laser systems to sense the emitted light. It would have been obvious to one skilled in the art to include such a sensor so that the characteristics of the light may be monitored and so that one can take appropriate action in response to any changes in the characteristics, as is well known.

Allowable Subject Matter

Claims 4-7 are allowed. The following is an examiner's statement of reasons for allowance:

Regarding claim 4, there is not taught or disclosed in the prior art a laser system comprising a laser oscillation means for employing a discharge to excite a gas laser, a box for

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storing said oscillator means, where a graphitized layer is formed on an inner wall of the box at a location where uv rays generated by the discharge are exposed.

Regarding claim 7, there is not taught or disclosed in the prior art a laser system as above where there is a recess portion in the box for receiving uv rays generated by the discharge and reflecting said rays back through the discharge space.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

Applicant's arguments filed 3/22/2004 have been fully considered but they are not persuasive.

Applicant's arguments concerning the Prein reference (claims 1-3 and 8) are not persuasive.

Applicant argues that the purpose of Prein is not the same as the present invention. Applicant argues that in Prein the uv rays are not used for a positive effect because the catalyst is not particularly positioned to be exposed to uv radiation. This is not persuasive. The catalysts 13 in Prein are located as such that uv radiation from the discharge will necessarily impinge upon them. Thus, they are located "at a location where ultraviolet rays generated by the discharge are exposed." This is all that the claim requires. The purpose of Prein is not germane to the patentability of the claims, since Prein anticipates all of the claimed limitations.

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Applicant's arguments regarding claims 4-7 are persuasive and the rejections are withdrawn.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Menefee whose telephone number is (571) 272-1944. The examiner can normally be reached on M-F 8:30-5.

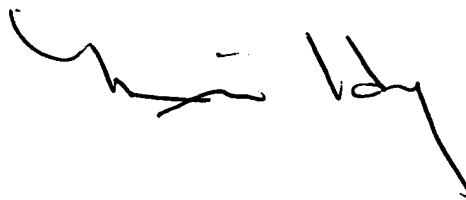
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MinSun Harvey can be reached on (571) 272-1835. The fax-phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JM
December 14, 2004



MINCUN OH HARVEY
PRIMARY EXAMINER